MDSS Project
Major Tasks & Milestones – FY2002

Presented by

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Welcome to the US Army Corps of Engineers Engineer Research and Development Center Cold Regions Research and Engineering Laboratory

MTS™ MitreTek Systems

ETL

National Severe Storms Laboratory

FSL

NCAR

Overview – MDSS Project Schedule

FY2000: Requirements Analysis
Technology Review by Labs

FY2001: Conceptual Prototype Development
(storyboard concepts & user feedback)

FY2002: Functional Prototype Development
Demonstration
Documentation
Technology Release

MDSS Project Objectives – FY2002

- To develop an automated end-to-end functional prototype MDSS that includes integration of environmental, road condition, and operational data.

- To develop a generalized prototype capability and display (CHI) that provides decision support based on STWDSR results. The display design process will be supported by a small group (~5) of DOT representatives.

MDSS Project Objectives – FY2002

- To continue development and verification of MDSS component algorithms in order to improve the accuracy of system products.

- To continue to build advocacy for programs and technologies that improve surface transportation weather and road condition information.

Rapid Prototyping Activities – FY2002

The development process in FY2002 will include:

a) System design process
b) Sample data gathering
c) User feedback process
d) Software development
e) System integration and testing
f) System documentation
g) System release

Major Tasks & Milestones – FY2002

Phase 1:

• Identification of DOT design group	early October
• Display design meeting @ NCAR	25-26 October
• Collect sample operational data	Nov-Dec
• Collect weather & operational data	Nov-Feb
• Finalize IOC rules of practice	Nov-Feb
• FP Design Document	31 Dec
• Software development	Oct-Mar
• FP integration testing	1-16 Apr
• Key Decision Point meeting	17 Apr

Major Tasks & Milestones – FY2002

Phase 2:

• Continue software development	Apr-May
• Prepare for Review 4 meeting	Jun
• Review 4 meeting	13-14 Jun
• Continue software development	Jun-Jul
• Documentation preparation	Aug-Sep
• FP integration testing	Aug-Sep
• Review 5 meeting	19-20 Sep
• MDSS FP Release 1	20 Sep

Primary Deliverables - FY2002

- MDSS FP Design Document
- MDSS Project First, Second, Third Quarter Reports
- Participation in KDP Meeting
- Definitive Licensing Terms for MDSS Components
- Participation in Reviews 4 and 5
- Delivery and Documentation of MDSS Components:
    - Road Weather Forecast System
    - Ensemble Model System
    - Precipitation Type Algorithms
    - Road Temperature Algorithm
    - Road Chemical Concentration Algorithm
    - Rules of Practice Module
    - MDSS Display System

Primary Technical Responsibilities of the Labs FY2002

NCAR: Lead Research Lab (LRO)
MDSS System Engineering Lead
Road Weather Forecast System
System Software Integration & Testing
MDSS Display

CRREL: Prime Contracting Organization (PCO)
Road Temperature Algorithm
Road Chemical Concentration Algorithm
Rule of Practice Module Development

Primary Technical Responsibilities of the Labs FY2002

LL:	**Rule of Practice Development & Coding**
FSL:	**Mesoscale Modeling** **Ensemble Modeling** **LDADS Data Conversion**
NSSL:	**Precipitation Type Algorithms** **Mesoscale Modeling**